

# HOUSE BILL REPORT

## SHB 1472

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### As Passed Legislature

**Title:** An act relating to initiatives to improve and expand access to computer science education.

**Brief Description:** Providing initiatives to improve and expand access to computer science education.

**Sponsors:** House Committee on Education (originally sponsored by Representatives Hansen, Habib, Freeman and Magendanz).

#### **Brief History:**

##### **Committee Activity:**

Education: 2/7/13, 2/14/13, 2/21/13 [DPS];

Appropriations Subcommittee on Education: 2/25/13 [DPS(ED)].

##### **Floor Activity:**

Passed House: 3/8/13, 95-3.

Senate Amended.

Passed Senate: 4/16/13, 46-1.

House Concurred.

Passed House: 4/22/13, 95-0.

Passed Legislature.

#### **Brief Summary of Substitute Bill**

- Requires school districts to approve Advanced Placement (AP) Computer Science as equivalent to high school mathematics or science.

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### HOUSE COMMITTEE ON EDUCATION

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 21 members: Representatives Santos, Chair; Stonier, Vice Chair; Dahlquist, Ranking Minority Member; Magendanz, Assistant Ranking Minority Member; Bergquist, Fagan, Haigh, Hargrove, Hawkins, Hayes, Hunt, Klippert, Lytton, Maxwell, McCoy, Orwall, Parker, Pike, Pollet, Seaquist and Warnick.

**Staff:** Barbara McLain (786-7383).

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

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## HOUSE COMMITTEE ON APPROPRIATIONS SUBCOMMITTEE ON EDUCATION

**Majority Report:** The substitute bill by Committee on Education be substituted therefor and the substitute bill do pass. Signed by 10 members: Representatives Haigh, Chair; Fagan, Ranking Minority Member; Carlyle, Dahlquist, Haler, Maxwell, Pettigrew, Seaquist, Sullivan and Wilcox.

**Staff:** Jessica Harrell (786-7349).

### **Background:**

According to data maintained by the Office of the Superintendent of Public Instruction (OSPI), there are 35 high schools in the state approved to offer Advanced Placement (AP) Computer Science, and just under 700 students enrolled in AP Computer Science courses in 2011-12.

Although computer science is a career and technical education (CTE) course, school districts have been directed to examine their credit-granting policies and award academic credit for CTE courses that are determined to be equivalent to an academic course. The OSPI has developed a Course Equivalency Toolkit to assist districts in making these determinations. School districts are encouraged to consider computer programming as equivalent to a mathematics course. There is no data collected on district credit-granting policies.

To meet state high school graduation requirements, students must take Algebra I and Geometry in order to pass the state end-of-course assessments in those subjects. The State Board of Education has established Algebra II as the third credit of mathematics required for graduation, but students may select an alternative course based on their High School and Beyond Plan. Two credits of science are required for graduation, one of which must be a laboratory science. One of the minimum admissions requirements for public four-year institutions of higher education is that students take a math-based quantitative course in their senior year.

### **Summary of Substitute Bill:**

School districts must approve AP Computer Science as equivalent to a high school mathematics or science course, and must denote on a student's transcript that AP Computer Science qualifies as a math-based quantitative course for students who take it in their senior year. For AP Computer Science to be equivalent to high school mathematics, a student must be enrolled in or have completed Algebra II.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony (Education):**

(In support) The purpose of the bill is to help students train for high technology jobs and increase the supply of computer science professionals. The Task Force provides a platform for thinking creatively about the problem of a professional shortage. The bill has been developed with the assistance of many interested parties. This will help improve students' interest in computer science by making it a math or science credit. If they do become interested, the hope is that they will continue and take additional courses in college.

There are nearly three times as many job openings in computer science as there are qualified applicants. As a state, we are not keeping pace with providing opportunities for Washington students to gain the skills to qualify for these jobs, and we should look for every opportunity to expand computer science education. Students who take an AP Computer Science course are eight times more likely to major in computer science. This bill provides an extra incentive for students to take this course, and expands the capacity of schools to offer it. It should be clarified that the course equivalency in the bill occurs only after a student has completed the math and science course requirements for graduation.

(Opposed) None.

**Staff Summary of Public Testimony** (Appropriations Subcommittee on Education):

(In support) The aim of this bill is to get students prepared for high-paying computer programming jobs. In other states it has made a big difference to have the Advanced Placement (AP) Computer Science classes count as a math class, as students taking the class need the math credits when applying for college. Administration costs are minimal as are the individual grant costs. While fully supporting the grants, there is a minor concern regarding the AP Computer Science counting as a math credit. It is important to make sure that students continue to take pre-calculus and calculus.

(Opposed) None.

**Persons Testifying** (Education): Representative Hansen, prime sponsor; Lew McMurrin, Washington Technology Industry Association; Caroline King, Washington STEM; and Eleni Papadakis, Workforce Training and Education Coordinating Board.

**Persons Testifying** (Appropriations Subcommittee on Education): Representative Hansen, prime sponsor; Lew McMurrin, Washington Technical Industry Association; and Paul Francis, Council of Presidents.

**Persons Signed In To Testify But Not Testifying** (Education): Dave Powell, Stand for Children; and Jana Carlisle, Washington Roundtable and Partnership for Learning.

**Persons Signed In To Testify But Not Testifying** (Appropriations Subcommittee on Education): None.